

CLAIMS

1. A fuel cell comprising:
a fuel electrode, an oxygen electrode and a material capable of
conducting protons disposed between the fuel electrode and the oxygen electrode
5 wherein at least one of the fuel electrode and the oxygen electrode includes a current
collector that contains a current collector material composed of carbon nano-tubes.
2. The fuel cell according to claim 1, wherein the at least one of the fuel
electrode and the oxygen electrode comprises a catalyst material having a metal
component.
- 10 3. The fuel cell according to claim 2, wherein the metal component is
selected from the group consisting of platinum, platinum alloy and mixtures thereof.
4. The fuel cell according to claim 1, wherein the material capable of
conducting protons comprises a carbonaceous material substantially composed of
carbon defining a matrix structure that has one or more proton dissociative groups
15 introduced therein.